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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WILSON, ROBERT W	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,777	SAITO, YOSHIHIRO	
	Examiner	Art Unit	
	Robert W. Wilson	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8 and 15-17* is/are rejected.

7)☒ Claim(s) *3 and 9-14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 February 2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/23/04, 3/28/05, 7/21/05, & 5/16/05.

Claim Objections

1. Claims 3 & 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

2. Claims 6 & 14 are objected to because of the following informalities: Referring to claims 6 and 14, the examiner objects to the usage of the abbreviation in the claims "TCP/IP" and "ISCSI". The examiner requests that the applicant define the meaning of these abbreviations at least one in the claims before using the abbreviations. Appropriate correction is required.

Drawings

3. The drawings are objected to because applicant has not provided elemental names associated with the elemental numbers on the drawing. The examiner recommends that the applicant add the elemental names. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 4-5, 7-8, & 15-17 are rejected under 35 U.S.C. 102(E) as being anticipated by Ben Num (U.S. Patent No.: 6,831,893)

Referring to claim 1, Ben Num teaches: An apparatus (NMC per Fig 2) communicating with a device (First node per col. 6 line 6) via a network (network per col. 6 line 7) comprising:

A first processor (The combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 and per col. 5 line 35 to col. 11 line 4); and

A second processor (PP2 per Fig 2) and a network controller (Physical Access Unit per Fig 2) receiving a first and second types of packets from said network and selectively sending information in said first and second type of packets to said first and second processor (The Physical Access Unit receives all packets including the first and second type from the network and selectively sends the packets to the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) and PP2 per Fig 2 (second processor) and per col. 5 line 35 to col. 11 line 4)

Wherein said network controller sends information in said first and second type of packets to said first and second processor respectively (The Physical Access Unit (network controller) sends packet including header information in the first and second type of packets to the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) and PP2 per Fig 2 (second processor) and per col. 5 line 35 to col. 11 line 4) if the connection with said device has been established such that information said second type of packet is processed exclusively by said second processor (The examiner has interpreted that packets received by the

node (device) are classified as a flow based upon Source address from the node and are all forwarded to PP2 for processing per col. 5 line 35 to col. col. 8 line 57)

In addition Ben Num teaches:

Regarding claim 2, wherein said network controller send information in both of said first and second type of packets to said first processor if a connection has not been established (The Physical Access Unit (network controller) sends packet including header information in the first and second type of packets to the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) in order for the flow to be identified and once the flow is identified then it is determined which processor has been previously processing a flow type or connection and per col. 5 line 35 to col. 11 line 4)

Regarding claim 4, wherein said second type of packets is group of packets which meet specific conditions and said first type of packets is a group of packets other than said second type of packets (Packets are classified into flows based upon specific conditions or type wherein the second flow (second type) contains packets which are different from the first flow (first type) and per col. 5 line 35 to col. 11 line 4)

Regarding claim 5, wherein said network controller receives a first and second type of packets based on a first protocol and said second type of packets is further formed in accordance with a second type of protocol (The Physical Access Unit (network controller) receives both flows of packets which the examiner has interpreted as a first and second protocol and per col. 5 line 35 to col. 11 line 4)

Regarding claim 7, wherein said network controller includes a detector and distributor (The combination of Physical Access, Data Path and Header processor and Classifier per Fig 2 detect and distribute packets based upon flow and per col. 5 line 35 to col. 11 line 4)

Said detector determines whether a packet received from said network is said second type of packet and further determine whether if said second type of packet is to be sent to said first processor or said second processor (The classifier which is a part of the network controller determines the type of flow or packet type in order to determine whether to send the packets to a first or second processor and per col. 5 line 35 to col. 11 line 4)

Said distributor sends information in said packet received from said network to one of said first and second processor according to a determine of said detector (Path Data which is a part of the network control sends the packet received from the network to one a of first or second processor based including packet header information and per col. 5 line 35 to col. 11 line 4)

Regarding claim 8, wherein said detector refers to a predetermined portion of said packet received from said network to determine whether said packet received from said network is said second type of packet received (The classifier determines from information in the header or

predetermined portion of the packet received from the network in order to classify the packet or determine the type of packet and per col. 5 line 35 to col. 11 line 4)

Referring to claim 15, Ben Num teaches: a method (The method is performed via NMC per Fig 2) for processing first (First flow) and second type of packets (2nd flow) through a connection (identified flow or connection) with a device (First Node per col. 6 line 6) via a network (network per col. 6 line 7) said method comprising the steps of:

Receiving a packet from said network (Physical Access per Fig 2 receives a packet from network per col. 6 line 7 and per col. 5 line 35 to col. 11 line 4)

Determining whether said packet received from said network is said first type or said second type of packet (The combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 determine whether the packet is from a first flow (first type) or second flow (second type) from said network)

Selectively sending information in said packet received from said network to one of the first and second processor (The Physical Access Unit (network controller) sends packets including header information in the first and second type of packets to the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) and PP2 per Fig 2 (second processor) and per col. 5 line 35 to col. 11 line 4)

information in said packet received from said network is sent to said first processor if a connection with said device has not been established (The Physical Access Unit (network controller) sends packet including header information in the first and second type of packets to the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) and PP2 per Fig 2 (second processor) in order to classify the packet by examining the source address to determine if it is a new source address (new connection) or previously received source address (old connection) and per col. 5 line 35 to col. 11 line 4)

information in said packet received from said network is sent to said first processor if a connection with said device has been established and said packet received from said network is a first type of packet (If the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) determines that the flow is of a first type based upon source address and that the flow has been previously set up with PP1 then the flow is again sent to PP1 and per col. 5 line 35 to col. 11 line 4)

information in said packet received from said network is sent to said second processor if a connection with said device has been established and said packet received from said network is said second type of packets such a that information in said second type of packets is processed exclusively by said second processor (If the combination of Header Processor, Classifier, Data Path, & PP1 per Fig 2 (First processor) determines that the flow is of a second type based upon source address and that the flow has been previously set up with PP2 then the flow is again sent to PP2 exclusively and per col. 5 line 35 to col. 11 line 4)

In addition Ben Nun teaches:

Regarding claim 16, further comprising the step of: receiving information for detecting said second type of packets when a connection with said device has established (The Physical access receives header information within the packets in order to determine the flow type associated with a second type of packets which is used to determine of a processor has already been established for processing the data and per col. 5 line 35 to col. 11 line 4)

Regarding claim 17, where it is determined that said packet received from said network is a second type of packet if said packet received from said network meets specific conditions and if is determined that said packet received from said network is said first type of packet if said packet received form said network does not meet said specific conditions (Packets are classified into packet flow base upon information in the header or specific conditions. The reference has the capability assign a packet of a first type flow based upon a first condition and to make a packet which does not meet this condition into a second type of flow or second packet type and per col. 5 line 35 to col. 11 line 4)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ben Num (U.S. Patent No.: 6,831,893) in view of Elzur (Patent Pub No.: US2003/0172342)

Referring to claim 6, Ben Nun teaches: the apparatus according to claim 5 and said first protocol is TCP/IP and a second protocol (Classified classifies packet based upon information in the header where the header is TCP/IP)

Ben Nun does not expressly call for: second protocol is ISCSI protocol

Elzur teaches: second protocol is ISCSI protocol (ISCSI protocol associated with TCP/IP per Pg 2 Para [009].

It would have been obvious to add the ISCSI protocol of Elzur to the classification of packets into a first type and second type of Ben Num because ISCSI a special type of TCP/IP packet.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2616

RWW
7/24/07